

COMMERCIAL PHOTOGRAPHIC APPARATUS

FROM: EASTMAN KODAK STORES, INC., WASHINGTON, D. C. L. F. DEARDORFF & SONS

11 SOUTH DES PLAINES STREET, CHICAGO, ILL.

DESIGNERS AND BUILDERS OF PRECISION CAMERAS AND STANDS

FOREWORD

DEARDORFF CAMERAS AND OTHER DEARDORFF PRODUCTS SHOWN AND DESCRIBED IN THIS CATALOGUE ARE WHOLLY AMERICAN MADE BY L. F. DEARDORFF & SONS, 11 SOUTH DES PLAINES STREET, CHICAGO, ILL.

GENERAL INFORMATION — CONSTRUCTION — COMMERCIAL CAMERAS

The design incorporated in all Deardorff Commercial Cameras embodies most extreme movement of the Back and Front, long square Bellows, extra large Lens Boards and a rigidity of Construction that makes possible perfect reproductions of all scenes and objects both in the studio and out of doors.

They are strongly built and especially designed for precision photography, yet the weight is always kept at the minimum consistent with good engineering practice. The materials used in the construction are old Central American Mahogany, Brass, Steel, Aluminum Alloy, and all springs are made of Phosphor Bronze. All binding or lock nuts are of Brass fitted to Steel posts, which eliminates wear. The Bellows are hand-made from real leather, cemented to light-proof linings with water-proof cement.

The rigid construction and unique locking devices assure no movement during or between exposures and, therefore, all Deardorff Cameras are ideal for Direct Color, Color Separation, and Black and White work.

GENERAL INFORMATION — CONSTRUCTION — STUDIO CAMERAS

The exacting requirements of all Illustrative Photography demands the use of the Deardorff Studio Cameras, as only these cameras are furnished with extreme double swing Back and double swing Front. These swings are most necessary for making reproductions of every conceivable kind of subject under all physical conditions and are simple to operate. They fit into the studio practice of every photographic activity, including Models, Angle Shots, and straight "bread and butter" photography.

Included in the movements on these Cameras is a Sliding Front Board, which permits the lens and lens board to be quickly moved to any position, including the four corners of the front of the camera.

The extra long Bellows, 50" in the 8 x 10 Studio Camera and 75" in the 11 x 14 Studio Camera permits the use of extra long focus lenses for making actual size reproductions of very small objects without distortion of any kind. Therefore these cameras excel in making reproductions for Maintainence and Repair Manuals and also for making photographs used to help speed assembly work.

The Bellows are square, furnished in 25" sections, two of which are removable on the 11x14 Camera and one on the 8x10 Camera. The Cabinet Work is of extra heavy Central American Mahogany and the Metal Work is the same as described for our Commercial Cameras but of very heavy gauge for great strength and maximum rigidity.

GENERAL INFORMATION — CONSTRUCTION — COPYING CAMERAS

The Enlarging Reducing and Copying Cameras, Stands and Revolving Backs are illustrated on Pages 17 to 21 inclusive, together with complete specifications and other details which will assist those interested in high grade Precision built equipment of this type.

THE "WHY" OF SWINGS FOR—DRAWING, PERSPECTIVE AND "DEPTH OF FIELD"

Tilting the bed of the camera either upwards or downwards demands the use of the Deardorff Cameras, as they permit, through the proper manipulation of "Swings", correct drawing and perspective. Vertical Lines can be made to remain vertical and Horizontal Parallel Lines can be made to converge slowly or not at all and circular lines in true perspective.

THE FUNCTION OF "SWINGS"

- The Lateral Swing Back—To control Horizontal perspective or vanishing points.
- The Vertical Swing Back—To control the Vertical lines so that they will always be parallel or to converge at whatever angel is desired, should that be necessary.
- The Vertical Swing Front—To bring the Plane of Focus of the lens in coincidence with the negative when the camera is pointed up or down or when photographing objects which represent an Inclined Plane.
- The Lateral Swing Front—To bring the Plane of Focus of the lens in coincidence with the negative when turning the camera Sidewise or when photographing an object the Plane of which is not parallel with the plane of the negative.

Thus the greatest "Depth of Field" is possible with the lens at full aperture and, therefore, permits larger "taking"-apertures with greatly improved sharpness of definition throughout all planes of focus than is possible with cameras having limited movements. Fastest exposures can therefore be made under all conditions of lighting.

THE "WHY" OF STUDIO STANDS FOR ILLUSTRATIVE PHOTOGRAPHY

The best studio practice demands the use of the Deardorff Studio Stands, because they are rigidly constructed of heavy materials, are unlimited in their scope of action, and all the moving parts are so finely balanced, they are extremely easy to operate. The counterbalanced Bed makes it possible to easily move it and the camera up or down to any position required.

Two worm gears operated separately, by hand-cranks, give microscopic adjustment as to the position of the camera from the floor to top of stand and the tilting of the camera upwards or downwards. The Camera may be revolved completely around 360°. The extra heavy locking devices will secure the stand itself to the floor as well as hold the camera and bed of stand in the desired position without vibration.

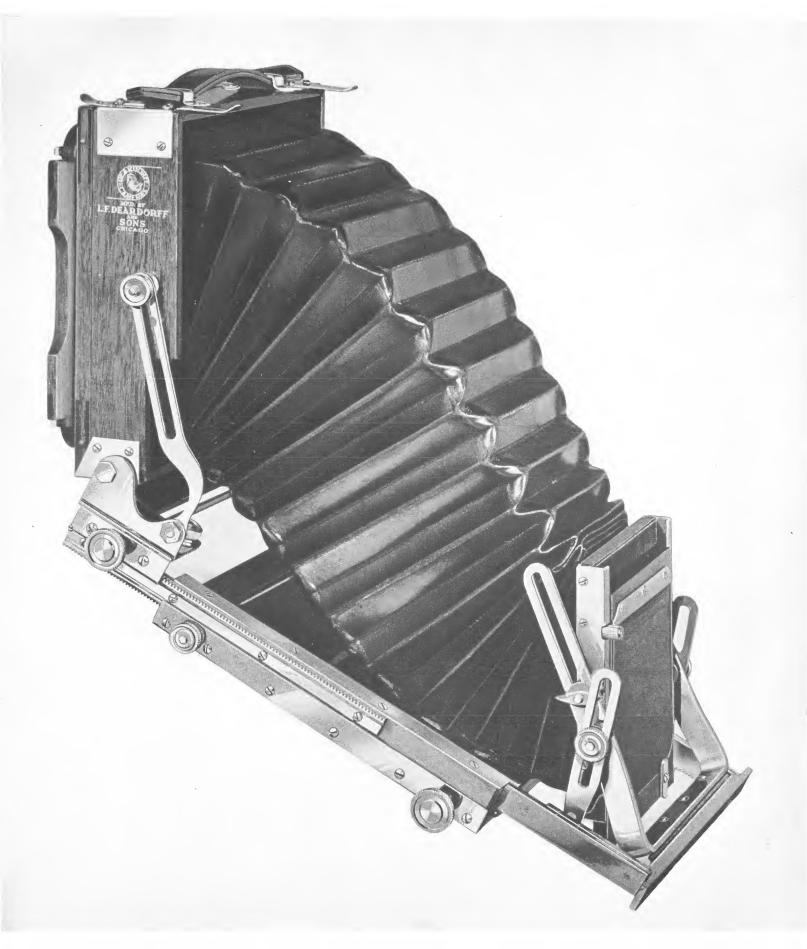
The Deardorff Triamapro 4×5 Camera which is illustrated in a separate catalogue is designed to meet the most critical requirements for a universal hand camera. Catalogue upon request.

L. F. DEARDORFF & SONS

LOOKING DOWN

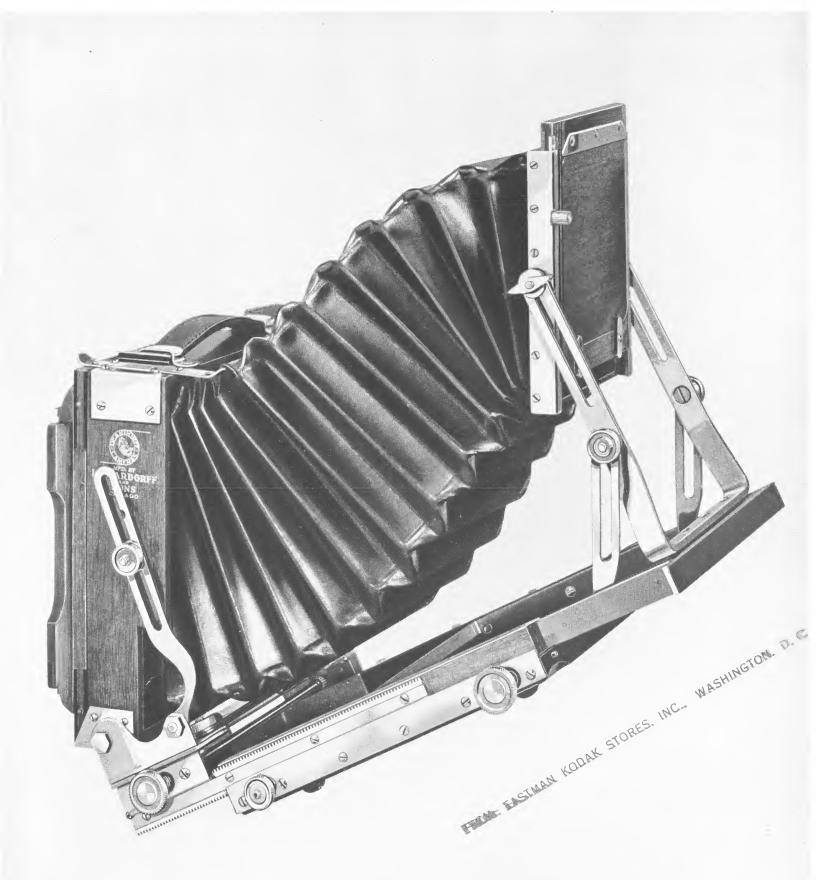
PRECISION VIEW CAMER

This illustration shows the double swing back and swing front set in perpendicular position. When looking down, this position of the back and front, completely eliminates distortion of the vertical and horizontal lines and the most difficult problems in photography are thus easily mastered.



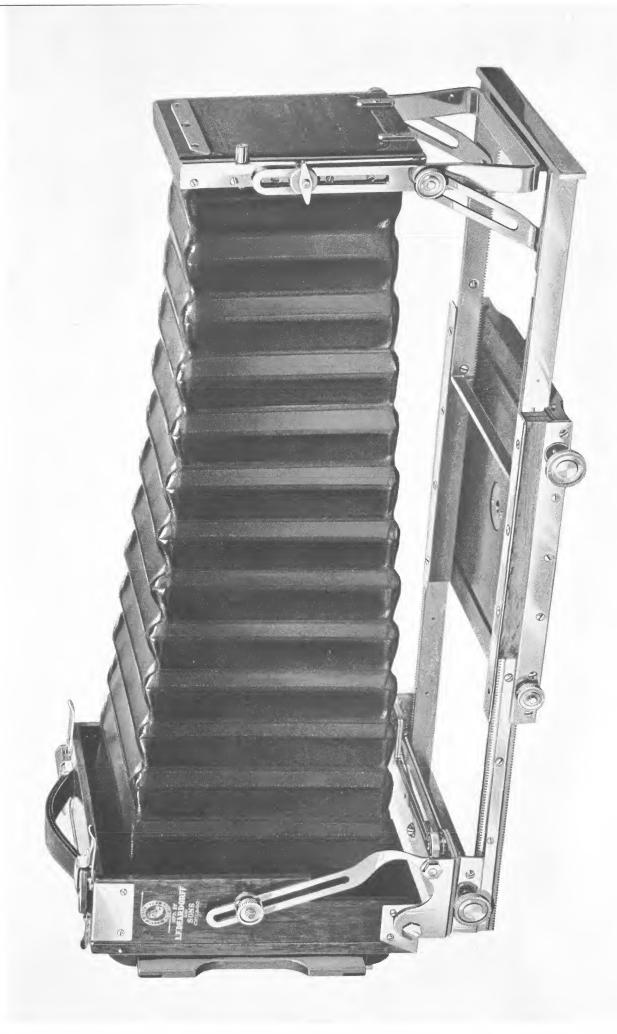
LOOKING UP PRECISION VIEW CAMERA

This illustration shows the bed of the camera tilted upwards and the double swing back and swing front set perpendicular which makes possible the photographing of tall buildings, high ceilings and similar problems without distortion of the vertical and horizontal lines.



The extreme bellows capacity permits the use of long focus lenses as well as normal focal lengths. Copying, Telephoto and normal work are easily accomplished, as the triple extension is self-contained on the bed of the camera, allowing perfect balance.

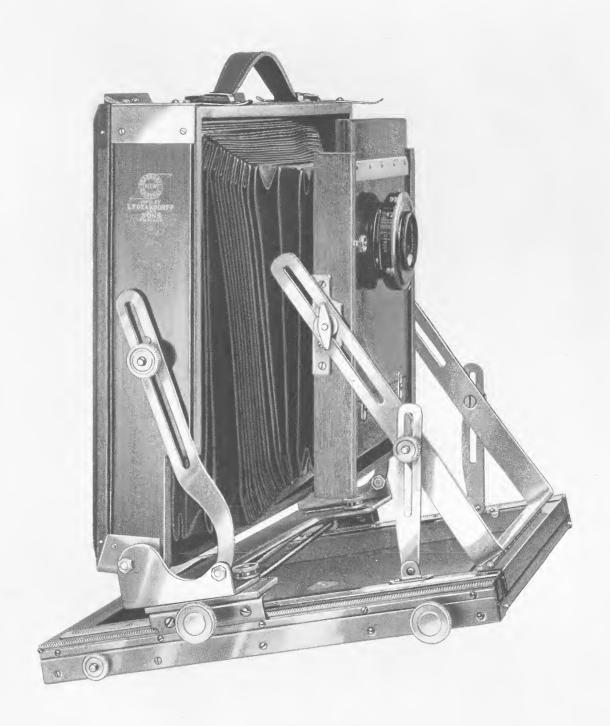
COPYING CLOSE-UPS



WIDE ANGLE SHOTS

PRECISION VIEW CAMERA

The back and front of this camera can be brought together over the center of the camera bed for the use of Extreme Wide Angle Lenses even with full correction. The swing back, extreme rising front and vertical and horizontal swings of the back are shown with extreme tilting of the camera bed. The bellows being square, there is no cutting off of the light circle.



LOOKING DOWN

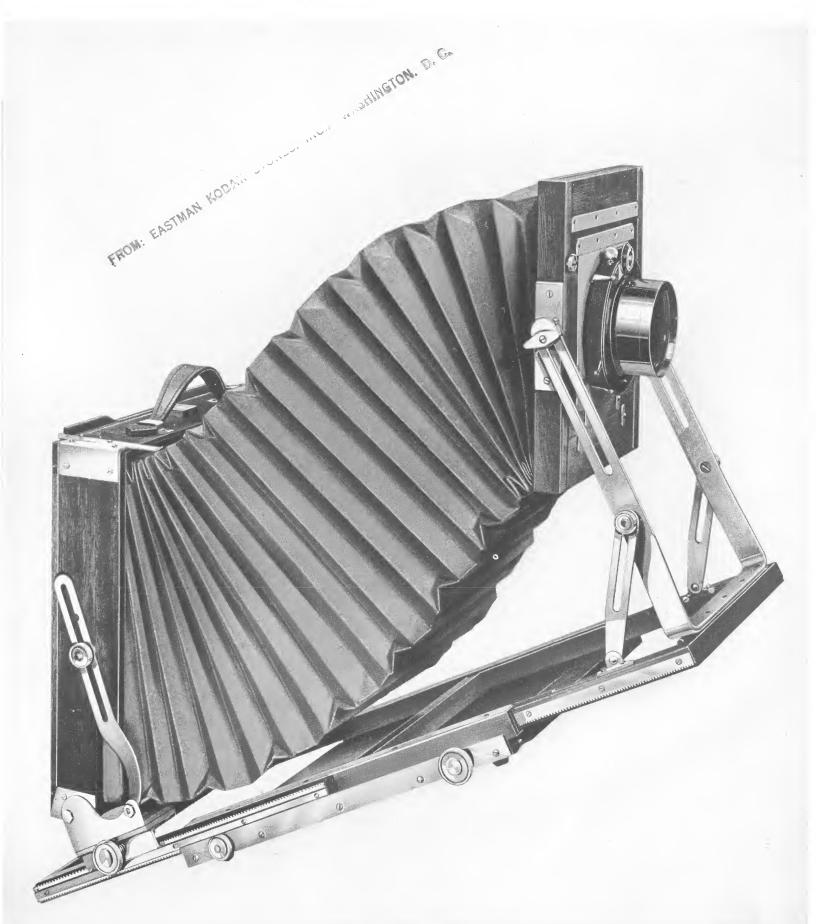
This illustration shows the camera looking downwards with the bed set at an extreme angle; the back swung perpendicular and the front swung parallel to the back. The frontboard lowered to the limit. Thus vertical distortion is completely eliminated.



LOOKING UP

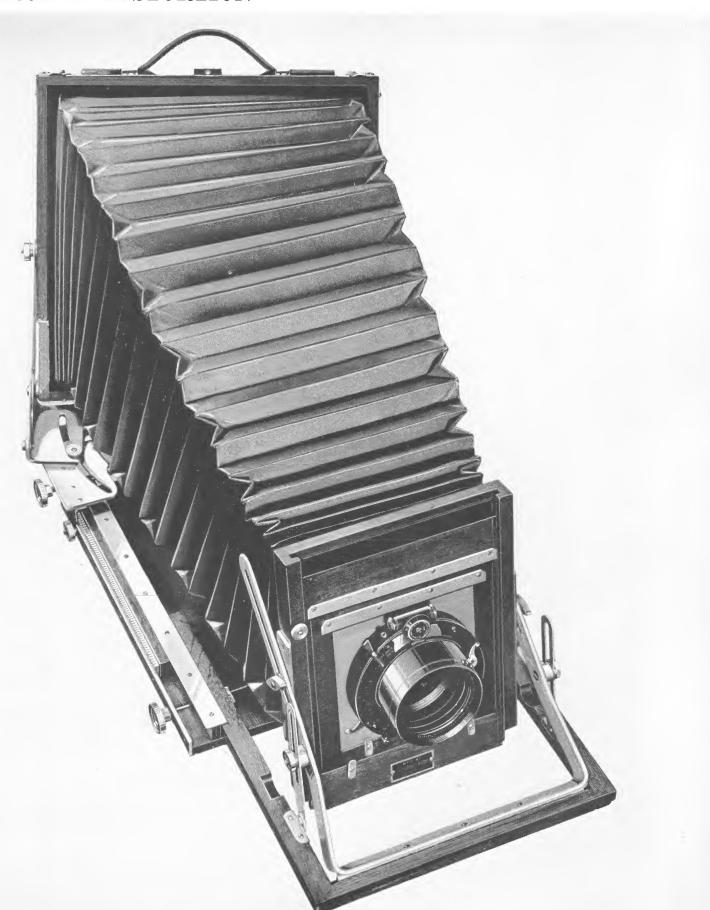
PRECISION VIEW CAMERA

This illustration shows the camera set looking upwards for photographing of tall buildings or other subjects requiring this position. It should be noted that the front and back can always be swung far enough to focus sharp at both top and bottom of the plate and vertical distortion eliminated.



HORIZONTAL AND VERTICAL CONTROL OF DISTORTION

Horizontal and Vertical control of distortion is easily accomplished by the back and front Vertical "Swings" and the Horizontal "Swing" of the back. Thus all Vertical lines are made vertical and parallel horizontal lines are made with or without perspective as desired.



DEARDORFF PRECISION CAMERA 4/5 - 5/7 - 8/10 - 10/12

THIS series made for many years has always led the field in perfection of design, compactness, rigidity, light weight, and ease of manipulation for making perfect reproductions.

The leading Commercial and Illustrative Photographers throughout the United States and Canada not only welcomed this Camera but proclaimed it as the Standard of perfection. The possibilities for making reproductions showing detail, drawing, and perspective not possible heretofore, and also permitting special lighting effects, have immensely improved this field of photography and has made this Camera the most successful instrument ever offered to the "photographic fraternity".

SPECIFICATIONS

The Vertical Swing of the Back is 30° each side of center. The Horizontal Swing of the Back is 20° each side of center. The Vertical Swing of the Front is 30° each side of center. The Front raises and lowers from $1\frac{11}{16}$ " to $4\frac{1}{8}$ " from center according to size of camera.

Back is square, reversible all the way around and supplied with cut-out boards.

Bed is made in four sections, Tongue and Groove construction with grain in two directions. The Box and Back are made with interlocking corners and are further reinforced with Metal.

The Front Board is square and reversible all the way around. Lenses with focal lengths from $2\frac{3}{4}$ " to 33" can be accommodated according to size of camera.

CAMERAS

Size of Plate	Focal Length of Lenses	Bellows Exten-	Size of Bell and Front	ows at Back of Camera	Rise & Fall of Front Total	Lens Board	Camera Closed	Wgt.
	From	sion	Back	Front	Inches	Doaru	Closed	Lbs.
4x5 5x7	2 3/4	18	$5\frac{1}{8}$ x $5\frac{1}{8}$	$3\frac{1}{2}$ x $3\frac{1}{2}$	3 3/8	3 ½ x3 ½	7½x 8 x3¾	4.1/4
8x10	$\frac{31/_{2}}{4}$	24	$8\frac{1}{4} \times 8\frac{1}{4}$	$4\frac{3}{4}$ x6	43/4	$4\frac{1}{2}$ x $4\frac{1}{2}$	9 $x10\frac{1}{4}x3\frac{3}{4}$	51/3
10x12	41/2	31	$11\frac{1}{4} \times 11\frac{1}{4}$	$6\frac{1}{4}x8$	65/8	6 x6	$12\frac{1}{2}$ x $13\frac{1}{4}$ x $4\frac{1}{4}$	10
IUAIZ	4/2	35	13% x 13%	$7\frac{1}{2}$ x10	81/4	7×7	$14\frac{1}{2} \times 15\frac{1}{2} \times 4\frac{1}{2}$	161

COMMERCIAL CAMERA BACKS

Size	Description
4x5 4x5-3 ½ x4 ½ -3 ½ x4-2 ½ x3 ¼ 5x7 5x7-4x5 8x10 8x10-5x7 10x12 10x12-5x7 10x12-5x7	Reversible all the way around Made of Central American Mahogany, the Cabinet Work same as in our Commercial and Studio Cameras, all springs Phosphor Bronze for permanent stiffness and flexibility.

CAMERA LENS BOARDS

Size of Camera	Description	Size of Board	
4x5 $5x7$ $8x10$ $10x12$	Mahogany, made in three parts to overcome warping.	$ \begin{array}{r} 3\frac{1}{2}x3\frac{1}{2} \\ 4\frac{1}{2}x4\frac{1}{2} \\ 6 x6 \\ 7 x7 \end{array} $	

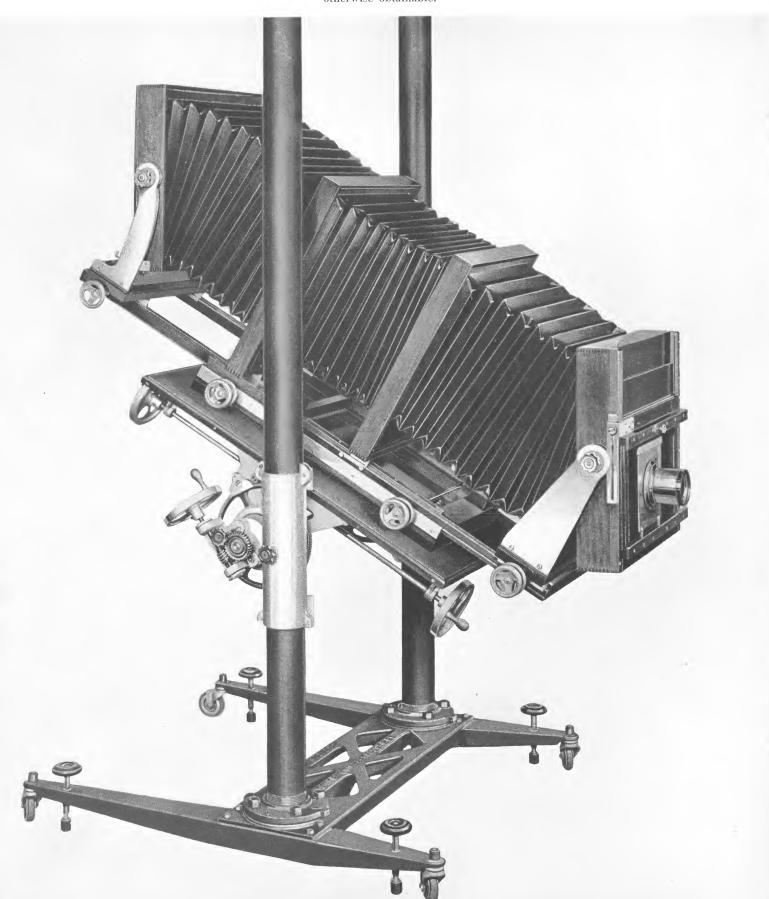
PACKARD SHUTTER ADAPTERS AND SHUTTERS

Size of Camera	Description
5x7 $ 8x10 $ $ 10x12$	with removable Lens Board with removable Lens Board with removable Lens Board

LOOKING DOWN

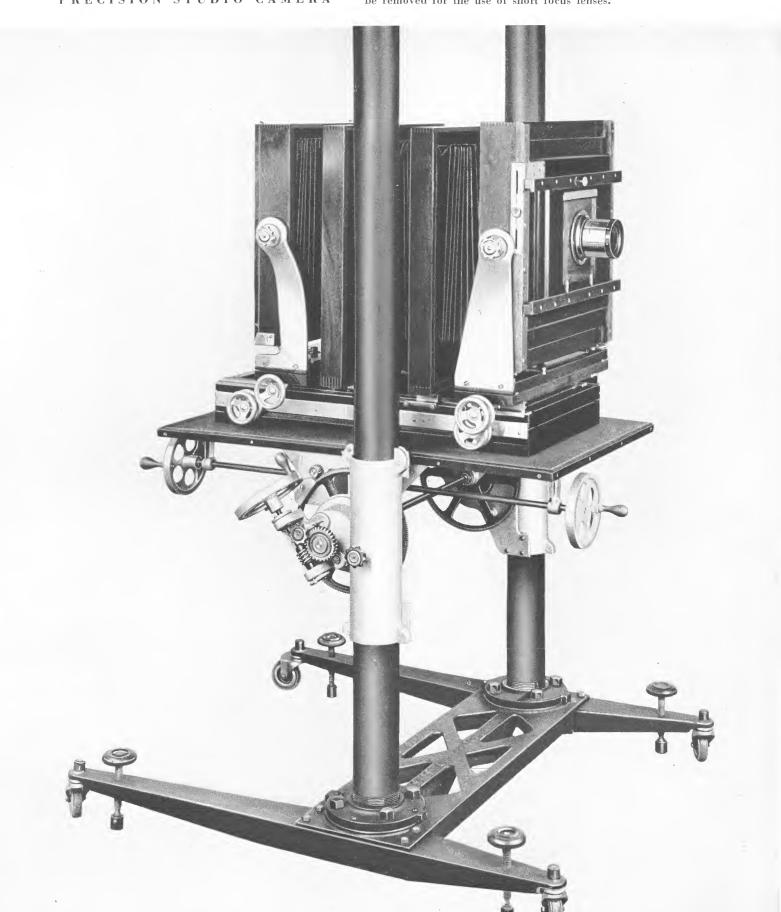
PRECISION STUDIO CAMERA

The camera and bed of stand are shown in position for making a Down Shot. The Vertical distortion is completely controlled by the Vertical Swing of the Back and the Front swung parallel with the back. The Sliding Front Board has been lowered to the extreme right hand corner which makes possible interesting angle shots not otherwise obtainable.



CLOSE-UPS PRECISION STUDIO CAMERA

The Deardorff Studio Cameras, when used on Deardorff Studio Stands, form the finest Studio equipment that is possible to obtain for Illustrative, Portrait, and Group Photography. The Bellows of the Deardorff Studio Cameras are made in 25" sections and may easily be removed for the use of short focus lenses.



DEARDORFF STUDIO PRECISION CAMERA

SPECIFICATIONS

BED

Made in two sections. Overall length, fully extended, 50". Main Bed Extension 29", Rear Extension 29". The beds are made of solid mahogany.

BACK

Double swing, vertical swing 30 degrees each side of center, horizontal swing 25 degrees each side of center, fitted with standard 8"x10" spring actuated ground glass back, 14½" square and reversible all the way around.

FRONT

Double swing, vertical swing 30 degrees each side of center, horizontal swing 25 degrees each side of center; 15\(\frac{1}{2}\)" square, fitted with double shift vertical and horizontal front. The back and front frames are made of solid mahogany. Lens board is $8''x8''x\frac{1}{2}''$ rabbeted to be light tight.

METĂL

Sliding shoes, cast brass.

Lock nuts, brass.

Metal used on swing equipment, brass castings with steel screws with multiple threads.

Focusing pinions and rods, steel.

Racks, brass.

Friction plates on back and front, brass. Front and back standards, cast aluminum.

Springs, phosphor bronze.

Size

BELLOWS

50" in length. Supported in center of bed on sliding midway frame with 25" of bellows each side of the frame.

BED

Made in three sections. Overall length, fully extended, 75". Main Bed 29", Front Extension 29", Rear Extension 28". The beds are made of solid mahogany.

BACK

Double swing, vertical swing 30 degrees each side of center, horizontal swing 20 degrees each side of center, fitted with standard $11'' \times 14''$ spring actuated ground glass back, $18^{1}/_{2}''$ square and reversible all the way around.

FRONT

Double swing, vertical swing 30 degrees each side of center, horizontal swing 20 degrees each side of center; 191/2" square, fitted with double shift vertical and horizontal front. The back and front frames are made of solid mahogany. Lens board is $8''x8''x\frac{1}{2}''$ rabbeted to be light tight.

METAL

Sliding shoes, cast brass.

Lock nuts, brass.

Metal used on swing equipment, brass castings with steel screws with multiple threads.

Focusing pinions and rods, steel.

Racks, brass.

Friction plates on back and front, brass. Front and back standards, cast aluminum.

Springs, phosphor bronze.

Description

BELLOWS

75" in length. Supported on the bed by two sliding midway frames.

See page 2 for additional description of Studio Cameras.

CAMERAS

Size of Plate	Minimum Focal Length of Lens	Bellows Square	Bellows Length	Rise, Fall, and Slide of Front from Center	Lens Board	Weight
8x10	12	12x12	50	3x3x3	8x8	45 lbs.
11x14	13	16x16	75	3x3x3	8x8	60 lbs.

CAMERA STUDIO BACKS

8x10 8x10-4x5 8x10-5x7 11x14 11x14-5x7 11x14-8x10 11x14-10x12	Reversible all the way around. Made of Central American Mahogany, the Cabinet Work is the same as in our Commercial and Studio Cameras, all springs are Phosphor Bronze for permanent stiffness and flexibility.
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STUDIO CAMERA LENS BOARDS

Size of Camera	Description	Size of Board	
8x10 11x14	Mahogany, made in three parts to overcome warping.	8x8 8x8	

PACKARD SHUTTER ADAPTERS AND SHUTTERS

Size of Camera	Description
$8x10 \\ 11x14$	with removable Lens Board with removable Lens Board

SHOTS FROM HEIGHTS PRECISION STUDIO STAND

Shots from Heights are easily made with Deardorff Studio Cameras and Stands. The cameras and stands may be rigidly locked into position and with complete absence of vibration regardless of the height at which the camera is operated or its position in relation to the floor.



DEARDORFF

PRECISION STANDS FOR CAMERAS

PRECISION STUDIO STAND

Construction Specifications

8 FOOT	10 FOOT	12 FOOT
Floor Space, 36"x44". Height overall, 8'8". Weight, 350 lbs.	Floor Space, 36"x44". Height overall, 10'8". Weight, 370 lbs.	Floor Space, 36"x44". Height overall, 12'8". Weight, 390 lbs.
UPRIGHTS 2 Steel tubes 8' long, 3½" diameter by 10 gauge wall.	UPRIGHTS 2 Steel tubes, 10' long. 3½" diameter by 10 gauge wall.	UPRIGHTS 2 Steel tubes, 12' long, 3½" diameter by 10 gauge wall.

BED

White pine, covered with green felt. Actuated around $360\,^\circ$ with worm and gear. Elevated and lowered through chain and gear drive. Counterbalanced.

BASE

Cast iron, 3 sections connected by $\frac{3}{8}$ " steel screws. Mounted on ball bearing rubber tired casters. Fitted with 4 leveling screws with swivel ends.

See Page 3 for Additional Description of Studio Stands

PRECISION HANDI CAMERA STAND

Construction Specifications

THE Handi Camera stand is made to meet a demand for a low priced, quick acting camera support. The upright standard is secured by special shims which prevent swinging vibration.

This stand is very convenient for supporting and pointing your spot light, flash light, etc., and is not easily tipped over. Can be used in close, difficult positions.

It is regularly supplied with a 6 foot Upright. Longer Uprights can be furnished at a slight increase in cost.

The Base is made of extra heavy cast iron and has three points of contact.

The camera can instantly be raised or lowered from the floor to the top of the Upright.

The bed of the stand rotates completely around the Upright.

The bed, fitted to an arm, is supplied with two movements, horizontal swing and tilting up and down. Camera can be tilted straight up or down.



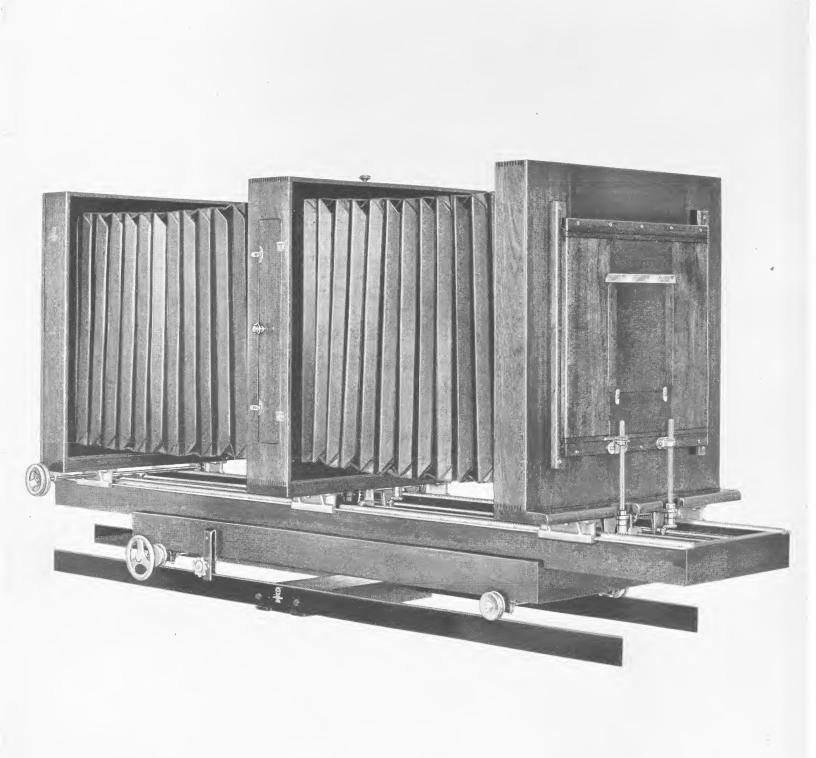
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PRECISION

ENLARGING REDUCING AND COPYING CAMERA

This illustration shows the Model C Camera with bellows extended and placed in position on Movable Carriage. It also shows the Camera fitted with heavy rods and gears for moving the lens board frame up and down and laterally, including the focusing movement of the front and center sections. These movements are controlled from the back of the Camera bed with a substantial crank. See illustration page 21.

The back Frame is also controlled through a hand operated focusing wheel.



DEARDORFF

PRECISION ENLARGING REDUCING AND COPYING CAMERA 8/10-24/24

SPECIFICATIONS

These Cameras are made of Old Central American Mahogany.

The Bed is single extension 6 feet long and is constructed of heavy Mahogany Rails and fitted with two or more cross members, besides the ends, for greatest strength and rigidity. The ends are fitted with interlocking corners and all parts are held together with the best grade of glue.

Attached to each Rail is a heavy Steel Rack extending the full length. Focusing is accomplished through Cut Steel Pinions mounted to Steel Rods operating on the Steel Racks, from three points; the Front, Center and Back Sections. This assures perfect alignment between these sections and the Copy Board.

These Cameras are made with three separate sections; Front, Center and Back. Each Section is made with Interlocking Corners and held together with the best grade of glue. The Front Section contains the Raising, Lowering and Lateral Sliding Lens Board Frame. The Center Section is fitted with an Entrance Door for the insertion of the Lens Board Frame when making Reductions, and to the Back Frame is mounted the Spring Actuated Ground Glass Back.

The Front Frame is made to receive Kits for making Transparencies and Lantern Slides. All the Frames are Square and the Back of the camera is reversible all the way round. The Back is made in four sections, Tongue and Groove construction with grain of wood running in two directions.

The Camera is made in three models. Model A. Completely hand operated by focusing wheels at the Front, Center and Back Sections. Rising, Lowering and Shifting Front operating at front of Camera only and supplied with heavy locking device.

Model B. Front and Center Sections focused through the rods and gears from Back of Camera bed and the complete mechanical movement of the Shifting Front from the same point.

Model C. Includes all of the mechanical movements of Model B but permits the Shifting Front to be mechanically operated when used in the Center Section.

The Bellows are Extra Large and Square, made in Two Sections of 36 inches each and are screwed to the three wooden Frames. The Bellows are made of heavy waterproof material, reinforced and lined with similar material making them light tight and very strong.

These cameras in 17x17 and larger sizes are supplied with Ground Glass Frame and one Film Holder or they may also be fitted with our Standard Ground Glass Spring Actuated Frames to take the standard cut Film Holders for 11x14 to 5x7 inclusive.

All sizes of this Camera may be fitted with a Special Back including a Double Stayflat Holder. This equipment is special and is made only to order. Screen mechanism prices upon request.

CAMERAS

Size of Camera	Bellows Capacity	Kits
10x10	6'	8x10 to 31/4x4
14x14	6'	$14x14 \text{ to } 3\frac{1}{4}x4$
17x17	6'	$17x17 \text{ to } 3\frac{1}{4}x4$
20x20	6'	$20x20 \text{ to } 3\frac{1}{4}x4$
24x24	6'	$24x24$ to $3\frac{1}{4}x4$

ENLARGING REDUCING AND COPYING CAMERA BACKS

Standard Backs		Copy Type Focusing Panel and Holder		Stayflat Back with Ground Glass and Double Stayflat Holder	
Size of Camera	Size of Plate	Size of Camera	Size of Plate	Size of Camera	Size of Plate
10x10	8x10—5x 7—4x5			10x10	8x10
14x14	11x14— $8x10$ — $5x7$			14x14	11x14
17x17	11x14— $8x10$ — $5x7$	17x17	17x17	17x17	14x17
20x20	11x14— $8x10$ — $5x7$	20x20	20x20	20x20	16x20
24x24	11x14— $8x10$ — $5x7$	24x24	24x24	24x24	20x24

CAMERA LENS BOARDS

Size of Camera	Description	Size of Board All Sizes
All Sizes	Mahogany, made in three parts to overcome warping.	, 8x8

PACKARD SHUTTER ADAPTERS AND SHUTTERS

Size of Camera	Description
All Sizes	with removable Lens Board

PRECISION

ENLARGING REDUCING AND COPYING STAND

This illustration shows the Stand for the Enlarging Reducing and Copying Camera. The threads on the legs are extra long and are fitted with floor flanges which are utilized for leveling. The fixed type of copy board is shown. For other types of Copy Board mountings see Page 20.



DEARDORFF

PRECISION STANDS for ENLARGING REDUCING and COPYING CAMERAS

THE Stands for Enlarging, Reducing and Copying Cameras are made of steel tubing. The construction used insures extra strength and lightness. The top of the stand is furnished with a Movable Carriage 4' long which rolls on wheels for ease of operation and long life. There is a suitable locking device for holding the carriage in the desired position. The Carriage is made of hard wood with interlocking corners and a central cross member for additional rigidity. All stands are fitted with our Standard 30"x40" Copy Board which is made of Bass Wood and easily removed from the stand.

CONSTRUCTION SPECIFICATIONS

Furnished in lengths from 10' to 15'. Shorter or longer Stands can be furnished to special order.

Steel Pipe—15%" O. D. and heavy End Castings.

- 4—or more Uprights 38" from floor, which places center of focusing screen approximately 60" from the floor.
- 4 or more Horizontals in sections to make up the desired length.
- 2 or more short Horizontals.
- 4 or more Floor Flanges.

All Couplings and Ends are Cast Iron.

Stand painted with Machinery Black Paint.

OPTIONAL COPY BOARD MOUNTINGS FOR WHICH THERE WILL BE AN EXTRA CHARGE

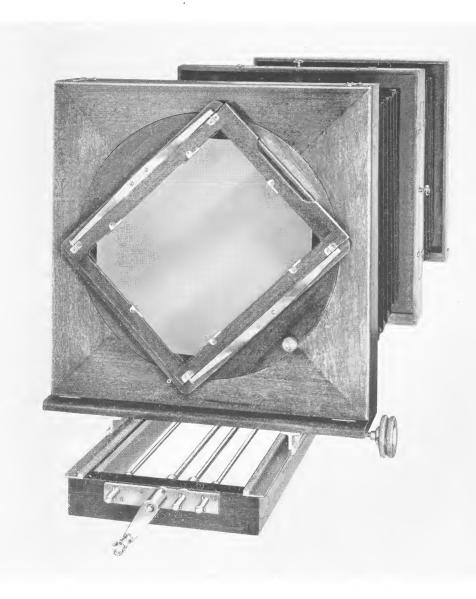
Tilting Copy Board, on Fixed Mounting.

Fixed Copy Board, mounted to Movable Carriage.

Tilting Copy Board, mounted to Movable Carriage.

REVOLVING BACKS For STUDIO and ERC CAMERAS

This illustration shows the 11x14 Revolving Back. Made of Old Central American Mahogany in four sections, tongue and groove construction with grain in two directions. Locking device is shown in lower right hand corner of Revolving Member. To this member is fitted the Spring Actuated Ground Glass Frame.



SPECIFICATIONS

The Back is constructed to Revolve completely around 360°, and permits the making of exposures at any angle. There is no leakage of light at any angle while Rotating the Revolving Member. The Revolving Member is fitted with a Substantial Lock Nut and Washer and a Spring Actuated Ground Glass Back. The Actuating Springs and Clips for holding the Back to the Camera are Phosphur Bronze, assuring Permanent Stiffness and Continuous Flexibility. All other parts are of Brass. The Wood Surfaces are covered with five coats of Waterproof Lacquer.

REVOLVING BACKS FOR STUDIO CAMERA

REVOLVING BACKS FOR E R C CAMERA

Size of Camera	Size of Plate	Size of Camera	Size of Plate
8x10	5x7-4x5	10x10	5x7-4x5
11x14	8x10-5x7-4x5	14x14	8x10-5x7-4x5
		17x17	8x10-5x7
		20x20	11x14-8x10-5x7
		24x24	11x14-8x10-5x7

TO THE PROFESSION

The apparatus which we manufacture and describe in this catalogue may be found displayed in the leading professional photographic stores everywhere.

Careful examination may be made and the various operations fully explained by competent people in these stores.

We design and manufacture apparatus for special requirements and will welcome correspondence direct with our factory.

GUARANTEE—All Deardorff cameras and other equipment manufactured by us and listed in this catalogue are guaranteed as to material and workmanship for one year from date of purchase.



TERMS

To avoid delay, purchasers with whom we have no account and who have no mercantile rating should accompany their first order with commercial reference or remittance in cash, money orders, New York or Chicago current funds, as your local check may be subject to collection charges.

No C.O.D. shipment will be made unless sufficient funds to cover delivery charges both ways accompany the orders. Goods made on special order or sent on approval will not be forwarded C.O.D.

Equipment made to order is NET.

All shipments F.O.B. our factory, Chicago.

Separate price list gives complete prices for the Deardorff cameras, stands and other accessories.

HOW TO USE DEARDORFF CAMERA "SWINGS"

- 1. Attach the DEARDORFF COMMERCIAL CAMERA to tripod.
- 2. Open camera, locking front standard and lens board tightly. Adjust bed of camera in horizontal, tilted upward or tilted downward position according to subject to be photographed.
- 3. SWING back to perpendicular position and lock.
- 4. Focus as sharply as possible.
- 5. SWING lens and lens board while watching ground glass and note the planes which are not "sharp focus" come into reasonably "sharp focus."
- 6. Note carefully that when the lens and lens board are parallel to the back, there is no distortion of the VERTICAL lines. If the HORIZONTAL lines converge too quickly for true perspective, SWING the back of the camera horizontally, bringing it more nearly parallel to the part of the subject showing the converging lines, until the perspective is satisfactory.
- 7. Still watching the image on the ground glass "stop down" until the whole view is sharp.
- 8. RESULT . . . PERFECT conditions under which to make a negative . . . Resulting negative perfect. . . . No distortion of lines together with true perspective.
- FOR ADDITIONAL INFORMATION READ "THE FUNCTION OF SWINGS" ON PAGE 3.



Hedrich-Blessing Photograph

Made with Deardorff 8 x 10 Precision View Camera

Courtesy of Crane Co.